

C-IRO, Inc.
An Independent Review Organization
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Austin, TX 78726

Notice of Independent Review Decision

DATE OF REVIEW: MAY 9, 2008

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

63090 - Removal of vertebral body; 63091- remove vertebral body add-on; 22845 - insert Spinte fixation device; 22851- apply spine prosth device.

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION

MD, Board Certified Orthopedic Surgeon

REVIEW OUTCOME

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

- Upheld (Agree)
- Overturned (Disagree)
- Partially Overturned (Agree in part/Disagree in part)

INFORMATION PROVIDED TO THE IRO FOR REVIEW

Adverse Determination Letter, Dr. 03/06/08
Adverse Determination Letter, Dr. 03/25/08
Official Disability Guidelines Treatment in Workers' Comp 2007 Updates, low back
ER note, Medical Center, 09/27/07
Lumbar sacral spine x-rays, 09/27/07
H&P, 09/27/07
MRI lumbar spine, 09/28/07
Discharge summary, 09/29/07 to 10/02/07
Physical therapy notes 10/2/07 to 10/20/07, 10/29/07 to 11/08/07
Office notes, PA-C, 10/16/07, 02/20/08, 02/06/08, 03/25/08
Office notes, Dr. 11/15/07, 12/20/07, 02/28/08
Office notes, Dr., 12/03/07, 12/21/07

Operative report, 12/12/07
EMG, 02/20/08
Letter, Dr. 02/27/08, 03/13/08
Office note, 02/28/08
Chart note, Dr. 04/04/08

PATIENT CLINICAL HISTORY [SUMMARY]:

This is a female who injured her lower back when she lifted a patient. The claimant complains of lower back pain and left leg pain to her foot associated with numbness and tingling. The MRI of the lumbar spine dated 09/28/07 showed a broad based disc bulge at L5-S1. The electromyography on 02/20/08 revealed left L5 radiculopathy. This claimant has been treated with physical therapy, medications, off work and epidural steroid injections. Dr. has been following the claimant and has recommended an artificial disc replacement.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION

Artificial total disc replacement is not supported as medically necessary in this case. The use of artificial discs remains investigational and somewhat controversial. FDA literature documents the fact that although some artificial discs are approved for use, further investigation regarding their long term efficacy is needed. There have been some early studies that have shown promising results with disc replacement surgery; however, there is very little evidence on outcomes after disc replacement surgery beyond 2 or 3 years. A long term study for continued effectiveness of the artificial disc is crucial. While short term outcomes for artificial total disc replacement may appear to be favorable, this procedure lacks well controlled, peer reviewed literature to establish its long term efficacy. The request for 63090 - Removal of vertebral body; 63091- remove vertebral body add-on; 22845 - insert Spinte fixation device; 22851- apply spine prosth device is not recommended as medically necessary.

Official Disability Guidelines Treatment in Workers' Comp 2007 Updates, low back

Not recommended at this time for either degenerative disc disease or mechanical low back pain. See separate document with all studies focusing on [Disc prosthesis](#). Studies have concluded that outcomes in patients with disc disease are similar to spinal fusion. ([Cinotti-Spine, 1996](#)) ([Klara-Spine, 2002](#)) ([Zeegers, 1999](#)) ([Blumenthal, 2003](#)) ([Zigler, 2003](#)) ([McAfee, 2003](#)) ([Anderson-Spine, 2004](#)) ([Gamradt-Spine, 2005](#)) ([Gibson-Cochrane, 2005](#)) A recent meta-analysis, published prior to the release of the Charite disc replacement prosthesis for use in the United States (on 6/2/2004 an FDA panel recommended approval of the Charite® disc from Johnson & Johnson DePuy), even concluded, "Total disc replacements should be considered experimental procedures and should only be used in strict clinical trials." ([deKleuver, 2003](#)) At the current time radiculopathy is an exclusion criteria for the FDA studies on lumbar disc replacement. ([McAfee-Spine, 2004](#)) Even though medical device manufacturers expect this to be a very large market ([Viscogliosi, 2005](#)), the role of total disc replacement in the lumbar spine remains unclear and predictions that total disc replacement (TDR) will replace fusion are premature. One recent study indicates that only a small percentage (5%) of the patients currently indicated for lumbar surgery has no contraindications to TDR.

([Huang-Spine, 2004](#)) Furthermore, despite FDA approval, the disc prosthesis is not generally covered by non workers' comp health plans ([BlueCross BlueShield, 2004](#)), or by some workers' comp jurisdictions. ([Wang, 2004](#)) Because of significantly varying outcomes, indications for disc replacement need to be defined precisely. In this study better functional outcome was obtained in younger patients under 40 years of age and patients with degenerative disc disease in association with disc herniation. Multilevel disc replacement had significantly higher complication rate and inferior outcome. ([Siepe, 2006](#)) With an implementation date of October 1, 2006, the Centers for Medicare & Medicaid Services (CMS), upon completion of a national coverage analysis (NCA) for Lumbar Artificial Disc Replacement (LADR), determined that LADR with the Charite lumbar artificial disc is not reasonable and necessary for Medicare patients. ([CMS-coverage, 2006](#)) ([CMS-review, 2006](#)) The U.S. Medicare insurance program said on May 28, 2007 in a draft proposal that it was rejecting coverage of artificial spinal disc replacement surgery no matter which disc was used. ([CMS, 2007](#)) This study reporting on the long-term results of one-level lumbar arthroplasty reported that after a minimum 10-year follow-up, 90% of patients had returned to work, including 78% of patients with hard labor level employment returning to the same level of work. ([David, 2007](#)) According to this prospective, randomized, multicenter FDA IDE study, the ProDisc-L has been shown to be superior to circumferential fusion by multiple clinical criteria. ([Zigler, 2007](#)) While disc replacement as a strategy for treating degenerative disc disease has gained substantial attention, it is not currently possible to draw any conclusions concerning disc replacement's effect on improving patient outcomes. The studies quoted above have failed to demonstrate a superiority of disc replacement over simple fusion for the limited indications for surgical treatment of lower back pain. Thus disc replacement is considered a controversial and unproven alternative to fusion surgery. The anatomic implications of total disc replacement are different from total hip or total knee replacements. The motion segments of the spine are not a single joint as is the case for the hip and knee. Often the source of pain for the spine is not clearly understood, whereas it usually is for the hip and knee. Therefore, the perceived corollary between total disc replacement and total hip or knee replacement is not justified. Furthermore, long-term follow-up repeat surgery rates are unknown for the disc prosthesis. Note: On August 14, 2006, the FDA approved the ProDisc® Total Disc Replacement by Synthes Spine, Inc.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**

- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES
- TMF SCREENING CRITERIA MANUAL
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)